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SYDNEY: SATURDAY, JUNE 26, 1920.

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The Treasury, Sydney,
8th May, 1920.

JOHN T. LANG,
Colonial Treasurer.

THE MEDICAL JOURNAL OF AUSTRALIA.

VOL. I.—7TH YEAR.

SYDNEY: SATURDAY, JUNE 26, 1920.

No. 26.

CONGENITAL WORD-BLINDNESS.

By R. A. MacLeod, M.D.,
Gympie, Queensland.

I have been tempted to record three cases of congenital word blindness that came under my observation, all in the same family, owing to the interest shown by *The Medical Journal of Australia* in the difficulty of training children who are either imbeciles or defective in some shape or form. In considering the cases I have seen, one is struck by the great hardship entailed on the family, especially as they are poor. The ultimate result is that the patients will become a burden on the State. So much might be done for them, judging by the statements we read of the success attained elsewhere. To go through a lifetime unable to read any printed matter, with all that this means in the intellectual development of a human being, is a great hardship. If anything can be done, it would be a matter of pride to see these individuals restored in some shape, so that they would have a chance of competing with their fellow creatures. I know of no institution where they could be trained. As I practise at some distance from a centre, I should be glad if someone could inform me if any such place exists in Australia. I quite grasp the difficulty, as personal tuition and not class teaching would, in my opinion, alone be successful. When I first saw the patients I made a provisional diagnosis of congenital word blindness, but it was not until I sent home for Dr. Hinshelwood's book that I was able to form a clear conception of the nature of the defect. It is to him I owe what better knowledge I possess. They had been seen by other medical men and they were looked on as stupid, perverse and in all ways undesirable. Not being able to do their school work, they were generally looked on as mental defectives. Two of them certainly are, but the third is not so and is the one I will chiefly describe. It had become so difficult to deal with them at home that they were last year sent to an asylum, not that I think the medical men who certified them, considered them to be insane, but more because they would be looked after and an attempt would be made to instruct them in some way. They were returned in six months and the medical officer of the asylum stated to the mother that they were not lunatics; that they were not imbecile and that the mental hospital was not the place for them. I state these facts as I am aware that by some they would not be classed as cases of pure congenital word blindness, as they possess other defects. While this is true, I think that one may be classed as a pure case.

There is no hereditary history. The family consists of eight children; the eldest three girls are quite normal. Then come my three patients, all boys, while after them in age are two quite sound children.

The second one, R.M., was the first I saw. His age is 14 years. He is spare in build and very active; his head in greatest circumference measures 50.6 cm.

He has a nervous disposition and is emotional, but speaks when addressed and replies in a quick, active manner. He is physically quite sound; has a good knowledge of the relations of objects, their nature and uses. There is no agnosia or apraxia; on speaking to him he hears well, he understands what is said and can repeat a sentence well. When asked to read from a book he can neither tell the letters of the alphabet, nor can he read any words. If asked to write, he can with difficulty and not at all clearly write "Bob"; nothing else. When told to write numbers, he writes at once a series of numbers, but when asked what the numbers are, he seldom gives a correct answer, and then it is by chance, as nine times running he made a mistake, with the exception of the number one which he always gave correctly. He could tell that they were numbers, as he knows that they differ from written characters. When shown figures of cats and dogs he knows them at once. One figure represents a boy posting a letter in a pillar box. He states the whole procedure quite correctly. When asked to copy a figure, he does so badly, but writing or copying from written characters he is quite unable to accomplish. He is very fond of music and knows that the sheets contain music and knows the difference between the staff and notes. He can sing tolerably. If asked to draw he will depict in a crude way a flag or a bird. On drawing the bird the beak and imaginary claws, eyes, etc., are placed as if he quite understands what he is doing.

I particularly notice that most of his hand movements are straight lines and that where it is necessary to insert a curve, he always does this slowly and with difficulty. His vision, as far as I could tell, is quite good. He could not be tested in the ordinary way, but small things held at a distance he seems to see as well as an ordinary child. He can see things equally well with each side of the eye. There is no lateral hemianopia discoverable. His auditory memory is very good; he repeats quickly a piece of poetry of about 24 lines, but this he does like the shot out of a gun, without the slightest emotional emphasis. It is a secondary automatic action. His parents state that his good memory is particularly noticeable and that his defect was not discovered at school for some time, as when it came to his turn to read, his verbal memory was such that he started away at once and deceived his teacher. When his defect was at last discovered and it was seen that he could make no progress at reading, everybody seemed discouraged and he was taken away from school at the age of 10, that is, four years ago. Since then he has received no instruction. As his two other brothers are mentally defective, he has lived a life in which discipline has received no consideration. The three children have been made the laughing-stock of the other boys; their whole intellectual life has been starved. They are unable to read; their ideas have the narrow characters of home life, without any external interests, owing to their defect. They are looked on as queer children and, in my opinion, their environment has made them much worse than they

would otherwise have been, had they had control and instruction. It certainly is very striking to see a child put down the Arabic numbers from one to ten quickly and correctly and, with the exception of one, be quite unable to tell what he had put on the slate. When asked to do a sum, he at once put down £ s. d. at the top, wrote five lines of figures underneath and in each line he added farthings; in the farthings he never exceeded the three, that is to say, they were either one, two or three farthings. He did not write anything that could not be comprehended, but in adding up, if I may use the expression, the sum of the numbers was never nearly correct; where there were two figures in the numbers to be added, there were only two figures in the total. I noticed that in his writing of the Arabic numbers in the sum, the spacing was neat and correct, as if his visual form, as distinguished from colour, was the better developed of the two.

He can spell many words quite well, but his auditory memory seems incapable of overcoming a simple addition. I asked him what three multiplied by two was and it was a blank proposition to him. Money he knows well and is sharp at distinguishing a sixpence or threepence and well knows the uses and nature of these tokens.

His elder brother, W.M., aged 16, has symptoms somewhat similar to those of R.M., although he is not bright and his general conduct betrays that of defective development. He does not show his weak points on examination, but his mother states she cannot trust him like the other boy. His head measurement is 51.25 cm. in greatest circumference. His hearing is good, but his memory is poor. He cannot repeat poetry, nor can he be treated like the brother. He can see neither words, letters nor numerals. He can spell simple words and can recognize figures, such as animals and simple scenes. He can tell that a cat is running after a slipper and shows a knowledge of the meaning of pictures. He cannot understand what he has written. The letters resemble pot hooks and circles. His name is the only word that a stranger could manage to decipher. He can draw simple figures. I asked him to draw a flag; this he did fairly well. I then asked him to draw a duck. To my astonishment, he used his left hand. They were all right-handed children and drew as well with one as the other. It was interesting to find him ambidextrous, as it indicated that the drawing centre or writing, or cheiro-kinesthetic, as Bastian terms it, was functionally active on both sides.

L.M., aged 12, the youngest, is decidedly mentally defective and inclined to be destructive. His speech is a form of idioglossia. All the members of the family understand what he says. He always uses the same sound; but no stranger could understand him. He knows flowers and figures. His memory is only fair, but the parents were so discouraged that they did not send him to school. They attempted to teach him, but, as far as I could make out, he does not know letters or figures.

The three cases seem all to be of one type, the only difference being variation in degree. All three children are word, letter and number blind; two of them are mentally defective; the other I consider

could be classed as a pure case of congenital word blindness. The test given by Dr. Hinshelwood is purity of symptoms and gravity of defect. Up to the time that B.M. left school his parents considered him bright and, indeed, were proud of his memory. It was so good that his teacher would ask him to call out the class roll, which he did from memory and quite correctly. Since then they had lived an isolated life and the absence of discipline and social life has decidedly affected their manner. In my opinion, this could be improved by tuition. A further point is that they were all boys; the girls escaped. This has been noticed often and it is stated that 90% of all the cases are in boys. Why this defect of development should be confined to one sex is difficult to determine, but the fact remains that the incidence of this defect is preponderatingly in the male.

When I first saw the children I was puzzled with some of the facts and found them difficult to explain. A few comments on my own difficulty may help others. In a subject like this, when mental and physical phenomena are mingled together in the descriptions given by authorities, and, indeed, by oneself, as it is impossible to avoid it, it is a matter of no small concern to get a nomenclature that will always have the same connotation. At present, for instance, the speech centre is located by Broca at the inferior frontal lobe, while Marie locates it in the lenticular zone. Others deny a speech centre. Bastian, for other reasons, calls it the glosso-kinesthetic centre and the writing centre, the cheiro-kinesthetic. It is held that there are no pure motor centres in the brain, so that the confusion at first is perplexing. I think it is made easier to grasp if the nervous system be described as by Gaskell and in accordance with modern custom. Any portion of the surface which reacts to some external form of energy is called receptor; any movement immediately or mediately following on this is an effector; between the two there is a connexion by nervous tissue, called the connector. The afferent nerves up to the ganglia in the posterior horn of the cord are the receptors, from the anterior horn outwards the effectors and the communication between these the connectors. The connector nerves can scarcely be called either sensory or motor nerves and Gaskell has indicated their particular function by a word which helps the mind considerably to grasp some of the facts. The great characteristic of this portion of the nervous tissue is that it is richly supplied with collaterals. The importance of this fact in understanding the various cerebral processes is great. If it be true, as has been stated, that every human being starts out his career with all the ganglion cells of the cortex complete at birth and that, although they may increase or decrease in size, the number remains definite, it can only be either by the development of collaterals by growth, or an increase in their permeability, that any associations can be formed within the brain. Now these connectors for voluntary action are all within the brain and cord, but it is somewhat startling to find that the vagus is a connector and that the corresponding effector begins in the ganglia at the terminals of this large nerve. The same applies with all nerve fibres in the optic tract within the brain; the receptor is in the

retina, but as embryologically this is well recognized as a part of the brain, it is not difficult to understand that the optic nerve as far back as the pulvinar and as far upwards as the region of the calcarine fissure, where the visual centre is situated, is considered by Gaskell to be connector. In his "Involuntary Nervous System" he states (page 22): "Just as the optic nerve is not a sensory nerve, but a nerve tract connecting two parts of the central nervous system."

A second fact to be kept in mind in trying to make this clear is that muscles are not represented in the cortex, but only movements of muscles. Another fact is that nearly all the nervous impulses go in one direction only; that if the sensory receptor is stimulated, it is the excitor which responds and not *vice versa*. I think this is believed to hold in the high nervous centres as well as the lower. It is well known that on electrical stimulation a current will pass both ways, but as present understood by Sherrington, each neurone connects with another neurone by means of a membrane, named by him the synaptic membrane, on the same principle as Langley's receptive substance on the muscular side of the neurone, which excites the muscles. Whatever changes take place in this membrane—colloidal, electric, or by adsorption—it is what is technically called irreciprocal, that is, it only goes one way. If this is so, it may have an important bearing on the complex systems that make up the cell and collateral organization in the brain, as all afferent impulses will be received and passed on in one direction and not the reverse. A fact very difficult to understand is that if Broca's lobe, for example, has received some injury and the condition of aphasia is brought about on the left side, the auditory memory, on being stimulated, passes on the impulse to the speech centre. This centre, being destroyed, cannot pass any energy on to the muscles in the medulla. In adult life this damage is generally permanent, but in youth cases have been recorded where the other centre takes on the function of the destroyed centre and the patient again learns to speak. I take it that the idea of pure connector fibres, going only one way, is quite different to that of commissural, or even association, fibres, which may lead us to think that the impulses may pass like an alternate current in either direction. It would explain how, if Broca's lobe has been destroyed, the other centre would have to be re-educated; that means that fresh collaterals would have to be established, as the centre would be unlikely to start off without some previous stimulus. It has always been a puzzle why there should be two centres. As an authority has expressed it: it seems strange that nature has made two similar halves, the one only a simple understudy of the other and only to be used if the other is in some way destroyed, but, if it be accepted that the whole system of relays only act in one way, it would help to explain it. I think the conception of fresh collaterals is of moment, when the education of the pupil is taken into consideration. It is well known that this is extremely difficult, requiring great tact, intelligence and patience, but if it be recognized that new nervous tissue has in some way to be formed and also rendered permeable against resistance, it will explain the long time required to learn to read, the time reckoned more by years than months. In an analogous

case, if the nerves to the foot are destroyed and regeneration by any means is brought about, it takes a long time, quite often extending up to two years, before conduction takes place and longer than this before any epicritic sensation can be made out and discrimination becomes as perfect as before. If these things are explained to anyone who undertakes the education of these patients, it may help them to persevere, because this is the only road to success.

There is another point of considerable interest. I noticed that when I was examining my patient and encouraging him to write or read he very soon became fatigued and tired and his attention easily wandered. It has been noticed in many cases that some of the adults give up the endeavour to read because it takes so much out of them. One phase of the fatigue is called dyslexia, when reading becomes impossible after a short time. If new tracts of nerve fibre have to be opened up under resistance, the difficulty may receive a physical explanation. I feel sure that anyone not used to mathematics, who, like myself, has attempted to understand the integral calculus, or to think in ratios or negative logarithms, will understand what I mean. I found it produced exhaustion and impatience. One can more fully appreciate the difficulty these poor children have when attempting to do what is relatively equally difficult to them, namely, to write and understand some simple words. This has a distinct bearing on teaching, as the deduction drawn is that the lessons must be short and often repeated and only given when the nervous system is fresh.

That a boy can write numerals and words quite correctly, and, as in my case, can write the numerals clearly and distinctly, with the spacing correct, or can formulate sums, even being correct in the farthings, and yet not recognize what he has just written on the slate, is not so easy to understand. All are agreed that the word centre is situated near the angular gyrus and supramarginal convolution at the lower posterior portion of the parietal lobe; the number centre is figured in physiological books a little lower than this and all the evidence points to distinct anatomical areas which have their own special physiological functions. The visual centre is in the occipital lobe, close to the calcarine fissure. When the retina is stimulated the connectors to the thalamus convey the message, which is transmitted by separate neurones through the optic radiations to reach the cortex in the occipital lobe. In this situation integration takes place and a percept is formed, but apparently it is only percepts of a very general nature that are stored up. My patient could see the picture of a boy posting a letter. This entails a recognition of form and a classification of form relations of co-existence; the process of posting the letter—a relation of succession—was also correctly classed. The visual percept centre was then activated; he then told us what it was. The connectors had linked up the visual centre to the auditory centre in the temporal lobe and thence to the glosso-kinesthetic centre; and the nervous impulse issued in speech. It is stated by some anatomists that the two occipital lobes are connected by commissures and that they are connected by association fibres with the angular gyrus. They do not, however, point out that the lobes

are directly connected with Broca's lobe. Von Monakow has demonstrated that fibres pass from the occipital lobe to the speech centre and, I presume, to the writing centre. My patient does not understand what he writes and only recognized the figure 1. Let us suppose that the colour and taste of an orange could be abstracted and become qualities or attributes and that this power of abstraction is impossible in lower races. In these circumstances the word orange would be used as a symbol. This would require a special functional process of a higher centre. On the other hand, certain objects, *e.g.*, cats or other animals, are probably recognized in their entirety and not by means of abstract qualities. The general relation of similarity, etc., suffice in these cases. My patient does not see numerals as symbols, but only as figures in space; he has a visual memory fixed for them. He reproduces them just as he draws an animal, from simple visual images. For example, when I asked him to write his name, the only thing he could write, he wrote "Bob." I asked him to read what he had written and he at once recited: "Bob M., Red Hill, Gympie." He maintained that it was all written on the slate. This might be regarded as a symbol, but it was the only symbol he was capable of recognizing. It seems to me that numerals appear to him as simple figures at the lower level of perception, without any abstract significance. Some fibres may have passed from the visual to the numeral or word centre, which may explain this. The angular gyrus may be quite intact, but, if it had not been brought into functional activity, it would be in the same state as if it did not exist. If it exists and the lesion is a subcortical absence of development, it may be re-educated, but at present it is impossible to make an accurate diagnosis. He cannot write from dictation, neither can he copy. It must therefore be assumed that it is quite inactive. That the fault is near the angular gyrus seems fairly certain. The subject is not an easy one, as there are so many variables. It is not difficult to frame an hypothesis, but the difficulty would be to strengthen it with some pathological fact. It is now acknowledged by the majority of psychologists that there is no unit faculty called memory; the power of remembering is made up of distinct, disconnected impressions. This has been demonstrated by Bastian in the case of a block between the visual word centre and the auditory centre. This conception gives us an insight into the working of the will. There is no faculty called will, but only a plural collection of will acts. It has been expressed by one authority: the "will is a bundle of acquisitions." Similarly, memory must be called up into consciousness before the following message can be transmitted to the next centre, just as is the case in an electrical relay system.

I wrote to the teacher of my patient, Mr. B. Ferguson, who has had a very large experience and on whose judgement I place the greatest confidence. I quote the following from his reply: "He was not any smarter in any branch of school work than any average child; he had a peculiar way of answering that on the surface gave the idea that he was sharp and quick, but when you made inquiry into matters, you found his replies were given thoughtlessly and haphazard. . . . I did consider him feeble-minded. . . . I have had many silly and imbecile children, but his

case was different from all others. To me he was always a paradox. Another teacher mentions his ability to call the roll from memory."

I would like to insist on the fact that Mr. Ferguson has had many silly and imbecile children, but that this child was quite different from others and a paradox. I think a recognition that these cases are cases apart is an important item from a diagnostic and educational point of view.

The question of treatment is not one on which I can give any first-hand knowledge, but I may be permitted to make a speculation. On reading an article by Pavlov about eight years ago I was struck by the fact that cerebral reflexes could be acquired in the lower animals. I think that if this can be done in dogs, the same principles may be applied to human beings. A bell was sounded and meat was presented to a dog. By association the bell, when sounded alone, subsequently caused secretion. By another process the so-called analysers were brought into play. Instead of the bell a metronome was beaten at a hundred per minute. This also produced the secretion. An interesting observation was made that when the metronome beat at 96 or 104, no result was produced. This is a very fine discrimination. The sound travelling to the medulla by the auditory nerve must have sent impulses along the connectors to the cerebrum and passing down they would lead the *chorda tympani* to cause secretion. A fresh neurone was thus added to the reflex. It is the addition of the new connexion that is wanted in a patient who is deprived of the angular gyrus. When the connexions had not been developed, it was found that the very strictest conditions had to be observed, that any extraneous sound or even anything that occupied the dog's attention, through the eye or touch of any other receptor, would be sufficient to inhibit the conditional reflex. Every detail in the handling of these cases is of vast importance, and only by minute attention to details can satisfactory results be obtained. I do not mean that a boy is to be treated like Pavlov's animal, but that the same principle should be applied. He should be kept in a room by himself and the reflex between the word and the utterance of a sound slowly brought about without the presence of any adventitious noise, words of encouragement, evidence of impatience, or unnecessary stimuli falling on his eye or ear. It would, no doubt, be a very difficult task, but it might be achieved in part at least. I think that this treatment would accelerate the teaching, which must be wearisome. It would require skill and knowledge of psychology. Every avenue of approach to the cortical cells may and should be brought into requisition, as the larger the number of associations, the more easily and perhaps at the same time more vividly would the impression be recalled. I think that something on the lines of conditional reflexes would make these avenues easier and quicker to traverse.

MEDICINE AT THE TIME OF THE PHARAOHS.

By J. K. Adey, O.B.E., M.B.,
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The medical profession of Egypt about 4,000 years before Christ was chiefly in the hands of the Priestly

schools. Physicians were divided into three classes: men trained in the science and art of medicine who studied from books and patients, exorcists who used charms, amulets, etc., and bone setters, who were half way between the two and whose chief function was to attend to surgical injuries with the assistance of the goddess Sokhit.

We shall consider the first class only. These trained physicians attributed their knowledge to certain books supposed to have been inspired by the god Thot, in other words, handed down from earlier times by oral tradition; and the records of the teachings of men whose names did not survive them. The Egyptians believed that no man could do original work, hence any new discovery was attributed to divine inspiration.

Doctors in those days were held in no small esteem, as shown by the fact that the court physicians had the right of wearing sandals in the presence of Pharaoh and of kissing his knee instead of his foot.

The profession was then, as now, divided into general practitioners and specialists. Oculists in particular were numerous and more than thirty different eye affections were differentiated.

Anatomy was not an exact science. One would imagine that the practice of embalming would give ample opportunities for the study of anatomy, but embalming was not done by the medical fraternity, but left to men of low caste, who were much despised by the rest of the people and who took no interest in the scientific aspect of their work. Physiology was also in a chaotic condition. The vital spirits entered the body by the ears or nose and mingled with the blood and sustained the man. The heart was the "perpetual mover, the beginning of all the members and whatever part of the body the physician touched, the hands, arms, legs, or breast, his hand lit on the heart and he felt it beating under his fingers" (1). At the moment of death the vital spirits withdrew with the soul; and the blood, being deprived of air, coagulated.

In the art of diagnosis they were much more advanced. They identified affections of the stomach, bladder, intestinal worms, varicose veins, and what they called the "divine malady"—epilepsy. Gynecology was in the hands of specialists and they were much interested in the subjects of fertility among women and the sex of the fetal child. Their methods of diagnosis were inspection, palpation, urinary examination and from a doubtful passage it has been inferred that auscultation was practised. The following is an account of the signs and symptoms of the commencement of gastro-enteritis. "The abdomen is heavy, the pit of the stomach is painful, the heart burns and palpitates violently, the clothing oppresses the sick man so that he can barely support it, nocturnal thirsts, the flesh loses its sensitiveness and if he seek to satisfy a want of nature, he finds no relief" (2).

Their treatment was energetic. They had many drugs, including the leaves of the sycamore, palm and cedar, sea-salt, alum and copper sulphate, the heart, liver, gall-bladder and blood of living animals, either fresh or dried, the milk of a woman who has given birth to a boy, the dung of a lion, or the brains of a tortoise. Physicians were also chemists and they

macerated, boiled, filtered or dried their drugs, and gave them in wine, water, milk or oil. They also practised blood-letting and had special drugs to cause sneezing. Their prescriptions contained important drugs, accessories and taste disguisers and were usually very simple.

"To relieve pains in the stomach of a child take an old book, boil in oil and apply to the stomach" (2). These books, being made of papyrus, after being boiled in oil, became practically a linseed poultice. An "old" book was recommended for economical reasons only.

"If thou findest in some part of the surface of the patients body a tumour due to a collection of pus and dost observe that at one point it rises up into a noticeable prominence of rounded form, thou shouldst say to thyself, this is a collection of pus which is forming among the tissues, I shall use the knife" (3).

The following is a charge against a student of the period. "Thou hast abandoned thy books and art devoting thyself to idle pleasures, thou smellest of beer."

The Greeks and Hebrews and later the Arabs learnt their medicine from the Egyptians, so there is no doubt that the methods of treatment at the time of the building of the pyramids have had an influence on the medicine of the twentieth century.

References.

- (1) Eber's "Papyrus."
- (2) Maspero, "Dawn of Civilization."
- (3) Neuberger, "Berlin Papyrus."

Reports of Cases.

PROLAPSE OF THE RECTUM.

By H. Stubbe, M.B., B.S. (Melb.),

Resident Medical Officer, Fremantle Public Hospital.

Mrs. C.O., *et.* 23 years, an Englishwoman, had been married for twelve months and had been in Australia for eight months. She was a primipara and was occupied in home duties. She attended the out-Patient Department on February 15, 1920, complaining of persistent prolapse of the rectum for the last three months.

On inquiry she gave the following history: She believed that she was now eight months' pregnant; she had not menstruated for eight months. Four months ago she had had lower abdominal pains and a slight vaginal hemorrhage. A doctor was called in, who examined her; he told her that she was four months' pregnant and was threatening to miscarry. She went into hospital for a week and nothing further occurred. The doctor told her that she would now carry on all right. One month after leaving the hospital (*i.e.*, three months ago now) she first noticed some prolapse of the rectum after defecation. This has become much worse lately. For the last six weeks the bowel has protruded about 7.5 cm. after each stool; she has some difficulty in reducing it. It has been down now for over 48 hours. She has not suffered from constipation or hemorrhoids.

On examination the following condition was noted. The oedematous rectum was protruding for about 10 cm. from the anus. It reduced fairly easily. Nothing abnormal was felt *per rectum* after the reduction. Abdominal examination showed no signs of pregnancy. She was advised to enter the hospital, but refused.

On February 18 she was admitted to the female surgical ward. The bowel was again prolapsed and was ulcerated. It again reduced without much difficulty. No hemorrhoids were found. No definite signs of pregnancy were detected; the breasts were normal, the cervix was firm and closed;

there was no bluish colouration of the vaginal mucous membrane; the uterus, however, appeared to be enlarged, the fundus was just palpable (bimanually) above the pubes. The patient was treated medically without success; the prolapse recurred after each stool. She did not menstruate.

On March 13 a modified Whitehead's operation was performed by Dr. Tregonning. Vaginal examination showed that the uterus was definitely enlarged, about the size of a four months' pregnancy. No other signs of pregnancy were noted. The patient's condition was not improved in the least by this operation. The prolapse remained as before.

On March 29 the abdomen was opened. The uterus was symmetrically enlarged and fairly firm. It did not look like a pregnant uterus. An aspirating needle was then thrust into it and clear, dark brown fluid was evacuated. The abdomen was then closed and the uterus was curetted. A hydatidiform mole was removed piecemeal.

Fifteen days later the prolapse had not recurred, although the bowels had been well opened. The patient's breasts now contain milk for the first time.

I am indebted to Dr. Tregonning for permission to publish these notes.

Reviews.

THE HYGIENE OF LIFE.

Professor Samey, who announces himself as Sentinel of Hygeia and Servant of India, has written a little book¹ on the care of the body, in which he has also included some rather mystical views on life, old age, the soul, etc.. We quote a few sentences to give an idea of the whole. "If through the lame labours of this limping Lilliput I shall have been able to leave the little corner better than I entered it, in the words of Huxley, I deem it the fulfilment of my destiny here below."

"For instance, a scientific body of France pulverized stone, and by the use of electricity produced from the atoms living insects."

"Life is something neither physical nor spiritual. It is allied to both, but it is neither. It is not soul, for soul is something infinitely higher than life—a something of which life itself is but an inadequate visible manifestation."

No further criticism is needed; the advice given by Professor Samey is on the whole sensible and not unreasonable, though he certainly "wowoses" and glories in his wowising; tea, coffee, cocoa, tobacco and, of course, alcohol are deadly poisons even in the smallest quantity and a course of athletics for the average young man is given which would apparently leave little time for the more serious business of life.

Professor Samey is, we presume, not an Englishman; for that reason we may forgive him his extraordinary literary style; but we may be pardoned for a disquisition on the writing of English in general. How seldom do we come across a doctor who can write; and yet writing ought to be the first and easiest of the arts. A few men, like, for instance, Treves in England and Hamilton Russell here, are able to put their thoughts into clear, vigorous and graceful English. Their example might be copied by anyone who would take the trouble. Yet too often we read papers written in so slipshod and slovenly a style that the matter contained in them has to fight its way through a maze of split infinitives and woolly abstract nouns that kill charm and nearly destroy meaning. What can be more terrible than the pompous pedantry of the German-Americans in the *Annals of Surgery*? Better even the simple-minded complexity of Professor Samey. And it is quite possible that much of the world-wide renown of the Mayos is due to the clear and pleasing English in which they have been able to clothe their thoughts.

A NATIONAL MEDICAL SERVICE.

The New Zealand Branch of the British Medical Association appointed a committee a short time ago for the pur-

¹ Personal Hygiene, by M. R. Samey, M.D., D.P.H., M.G.H.; 1920. Calcutta, London, Sydney, Winnipeg: Butterworth & Co., Ltd.; Demy 8vo., pp. 96. Price, 8s. net.

pose of drawing up a report on the establishment of a national medical service. This committee has now issued an interim report and has submitted the same to the Minister of Public Health, who has authorized its publication. In the opening paragraph the committee points out that the chief reason in favour of the introduction of a national medical service is the increased responsibility of the State to undertake the prevention of disease and the promotion of the health of the people. Reference is made to the organization of the medical service during the war. The committee states that, from the point of view of medical men individually, the present system of medical practice and the enormous development of specialization have made the work of the general practitioner difficult and burdensome; the measure of his success is his deprivation of leisure for recreation and study. It is proposed that the control of the service should be in the hands of a board, the majority of the members of which should be elected by the medical profession, while the Department of Public Health should have representation.

The scheme includes the following points. The Department of Public Health should be extended and the function of the various administrative heads should be more clearly defined. District health areas should be created, of a size convenient for proper control. The Health Acts should be codified and consolidated and the medical services of other departments, such as the Education Department, should be brought under the administrative control of the Ministry of Health. The members of the Board of Health should be elected by the medical profession. It is proposed that the work of the Health Department should be brought more into contact with the clinical side of medical work. For the remote and sparsely populated areas and for mining districts a national service should be established and the medical officers of the service should be under the control of the Board. The medical officers should be paid by salary and special payments should be granted for special services. The local hospital board would carry out the necessary book-keeping. Proper provision should be made to prevent friendly societies or similar organizations from gaining advantage at the expense of the medical officer or of the rest of the community. A similar service should be set up for the benefit of the poor in the cities and larger towns. This service would be undertaken by part-time medical officers.

The committee advocates a considerable increase in the State control of hospitals, with the retention of the local hospital boards. Stipendiary staffs of hospitals should be appointed by the Health Board. There should be no honorary staffs and the work carried out in the hospitals should be adequately remunerated on a part-time basis. The committee proposes to make provision for patients who are unable to pay for medical services and for those who are able to pay, but whose homes do not permit of adequate arrangements for medical treatment. There should be a building or buildings in the general hospital grounds for private patients of the class alluded to. The charge for accommodation, maintenance and nursing should vary according to the position, aspect and size of the rooms provided. The patient should have the right to select his own doctor. The fees for nursing attendance should be governed by the scale obtaining in private hospitals. The medical fees should be determined by private arrangement between the doctor and his patient. The profits arising from the maintenance of these patients should be used for the purposes of the general hospital.

VACCINATION IN VICTORIA.

In the *Victoria Government Gazette*, No. 120, of June 9, 1920, an announcement is made that the Commission of Public Health has appointed certain places to be places where public vaccination may be carried out and has fixed the hours for vaccination in each place. The surgery of Dr. Hutchinson, at Healesville, of Dr. Simpson, at Rupanyup, of Dr. Giblin, at Bright, and hotels at Lubeck and Marnoo comprise the first list. The vaccinations are carried out once a month at specified hours.

The Medical Journal of Australia.

SATURDAY, JUNE 26, 1920.

The Administration of Anæsthetics.

In our issue last week, a correspondent called attention to the recommendation by a dentist, speaking at the Congress of the Dental Association of New South Wales recently held in Sydney, of ethyl-chloride as a general anæsthetic for dental operations. He raises a question of considerable importance to the community, namely, whether a dentist without medical qualifications should be allowed to administer a drug for the purpose of inducing a state of unconsciousness during an operation. It is quite obvious that the alleged safety of one or other drug cannot be allowed to determine the practice. If dentists or other persons who have not passed through a complete course of training in medicine and who have not become qualified and registered as medical practitioners, are allowed to administer one, they must be allowed to administer another anæsthetic. It is therefore redundant to discuss the relative safety of ethyl chloride in this place, although it is necessary to recognize the general principle that the safety of the condition of general narcosis by chloroform, ethyl chloride, ether and the like is dependent on the skill, knowledge and experience of the person administering the drug. The law does not interfere with any person who chooses to administer any drug in the treatment of disease, provided that the patient places himself voluntarily under the care of this other person and provided that the person undertaking the treatment, not being a medical practitioner, does not lead the patient to believe that he is duly qualified or registered. In the case of dentists, the position is complicated by the fact that they are qualified and registered to treat persons for affections of the teeth. In many cases it is essential or expedient for the patient to be rendered unconscious or anæsthetic during the performance of a dental operation. The dentist has the option of employing local anæsthesia or general anæsthesia. If the former be chosen, the dentist accepts the responsibility for the consequences of the drug injected. It is well known

that cocaine or its substitutes are by no means devoid of danger. Many deaths have occurred as a result of the injection of cocaine for dental purposes. The dentist is not as a rule trained in pharmacology and consequently he cannot be expected to understand the mechanism of the absorption of the methyl esters of benzoyl-oxy-propionic acid. The public, however, is satisfied to trust the dentist to carry out the injection of the local anæsthetic. This confidence is based on the fact that many dentists have acquired considerable experience in the manipulation and carry it out with skill and care. Accidents are rare. We doubt whether it would be wise or necessary to warn the public against this common practice. The patients would probably not be safer in the hands of a medical practitioner, especially when the latter has not the same manipulative dexterity in dental operations as an experienced dentist.

The question of a general anæsthetic, however, is a different one. It has been laid down by the General Medical Council that a medical practitioner who allows a dentist to administer a general anæsthetic for the purpose of a surgical operation, is guilty of covering. Save under conditions of emergency a medical practitioner may not delegate the administration of drugs to induce general narcosis to anyone who is not registered as a medical practitioner. The reason for this unwritten rule is that a patient must not be subjected to a dangerous condition, unless the person bearing the responsibility is competent and skilled. Before the drug is administered, the patient should be carefully examined. It is not only essential that the anæsthetist should be aware of the condition of the heart and respiratory organs; the condition of the excretory organs should be investigated and an endeavour should be made to ascertain the state of the nervous control of the ductless glands and of the lymphatic system. The medical anæsthetist takes every precaution to safeguard the life of his patient. Should an accident occur in spite of these precautions and in spite of the skill manifested in the administration of the drug, he cannot be held personally responsible. It is the opinion of all who have administered ether and chloroform on thousands of occasions that these measures, together with a long experience in the art of giving the anæsthetic, contribute to the safety of the patient. The public should

therefore be warned against the practice of allowing dentists to administer a general anaesthetic. As long as the law does not forbid unqualified practice, we are powerless to prevent dentists from taking this considerable risk. The matter is one between the public and the dentist. Under war conditions, nurses and untrained assistants were frequently used as anaesthetists and no doubt many did the work well. The surgeon accepted the risk and the responsibility. There were no coroner's inquiries in the event of a death. In civil practice, the medical practitioner acting as surgeon does not share the responsibility of the anaesthetist. It would be intolerable if a nurse were allowed to administer the anaesthetic in a general hospital. If a death occurred and it could be proved that a surgeon were covering an unqualified person, the surgeon's name could be struck off the register. If the public understood these things and recognized that these rules are necessary for its protection, the practice of the administration of general anaesthetics by dentists would soon become limited. In the majority of cases, the dentist would resort to local anaesthesia, to the advantage of his patient and to enhancement of his own reputation.

SOME POINTS IN CONNEXION WITH ARTHRITIS.

There is scarcely a disease concerning which less accurate information is available than rheumatism. Chronic rheumatism is diagnosed in the absence of definite signs, on the basis of pain localized in joints and muscles and the physician making the diagnosis often consoles himself for his want of knowledge of the pathology of the condition by informing his patient that it depends on a diathesis and is usually the aftermath of an acute rheumatic affection. Others regard chronic rheumatism as a manifestation of a septic absorption from an infective focus in the nose, throat or teeth. Others, again, have a sort of hazy conception that the joint and muscle involvement of chronic rheumatism is brought about by some disturbance of the chemical processes within the body. This lack of accurate knowledge is especially unfortunate, since rheumatic and rheumatoid affections are extremely common. The Surgeon-General of the American Army recognized the detriment to the military machine produced by the frequent incapacity of soldiers from arthritis of various kinds and determined to inaugurate a comprehensive investigation into the general subject of chronic arthritis in soldiers. A special hospital was set aside for this study and Major Ralph Pemberton was placed in charge. This officer has had the assistance of a number of competent investigators in connexion with statistics, the estimation of the basal metabolism and of the nitrogen, urea, carbon dioxide, calcium, fat and cholesterol

content of the body, the renal function and the carbohydrate tolerance, the creatin metabolism and lastly with the clinical aspects of the problems involved.¹ The names of Dr. J. W. Robertson, Miss Edna H. Tompkins, Lieutenant Goodwin L. Foster and Dr. Thomas E. Buckman appear as co-authors of the several chapters of the work. It is impossible in a short summary to review all the evidence or to refer to all the arguments contained in the five articles covering 122 pages. Some of the points omitted or briefly noted are no doubt of considerable importance. Those interested in the subject should read the articles with care.

Dr. Pemberton had the opportunity of studying over 400 patients suffering from arthritis. In some instances little use could be made of this opportunity, but long series were utilized for each investigation. It appears that 256 men were suffering from arthritis alone, 112 had a combination of arthritis and myositis, 22 had myositis alone, seven had neuritis alone and in three the affection is entered as doubtful. The alleged cause of the affection was a previous attack of "rheumatism" in 35.75%. It is stated that the incidence of a previous attack of "rheumatism" among patients suffering from conditions other than arthritis was just over 7%. In regard to the presence of a septic focus, called by the author a surgical focus, he has some highly interesting information to offer. Of the 400 patients, 107 or 26.75% were found to be free from an ascertainable focus. Every patient was examined with great care by specialists. Of the remaining 293, 208 had foci in the tonsils, 134 had foci in their teeth and 50 had foci in the genito-urinary system. Further investigation revealed that 46% of the patients recovered in spite of the persistence of the focus, 77.5 % recovered "by whatever means," by which the author intends to convey that the recovery was obviously not influenced by the treatment, 23% recovered in the apparent absence of an infective focus, 8.5% recovered after the removal of the infective focus, 7.75% were improved by the removal and 7% were unimproved by the removal. In regard to other alleged aetiological factors, exposure to cold and wet was incriminated in 58% of cases, dysentery in 8.25%, injury in 7.5%, influenza in 7%, "gas" in 5.75% and so on. After giving due consideration to the aetiological aspects of arthritis in soldiers, as seen by him in the special hospital, he is forced to the conclusion that the fact of the recovery of so many patients in spite of the presence of foci, indicates that the affection in soldiers shows a considerable independence of septic foci. The possible significance of these foci is dealt with more fully in connexion with the carbohydrate tolerance. Before examining this aspect of the question, he turned his attention to the basal metabolism in his patients and found that in the vast majority it was within normal limits. The measurements were made by the indirect method by Tissot's plan. It has, however, yet to be proved that the oxygen and carbon dioxide figures and the respiratory quotient can be accepted as indicators of the irreducible tissue change in the sense in which Rubner employed the term basal metabolism. It was found that the carbon dioxide com-

¹ Archives of Internal Medicine, March and April, 1920.

binning power of the blood, the fat content of the blood and the cholesterol and the calcium content of the blood during fasting were not ascertainably altered in these arthritic conditions. It appears that there is a slight increase of creatin in the blood in arthritic patients, but the significance of the synthesis of this substance and of creatinin is not properly understood and further information is required before a slight increase in blood creatin can be assessed at its true value. The author found that the renal function was not seriously disturbed. The elimination of water, nitrogen and of salt appeared to be somewhat lessened. He is not prepared to attach importance to this finding. Very definite data were obtained in the tests for sugar tolerance. The sugar content of the blood rose after the ingestion of 100 grammes of glucose to a level considerably higher than that registered in a normal person. This lowering of the tolerance to sugar appeared to vary with the intensity of the arthritis condition. In convalescents it was normal or nearly normal. In severe chronic affections it persisted. In mild affections it was little evident and at times entirely absent. When recovery followed the removal of a septic focus, the sugar tolerance became normal as the joint lesions cleared up. On the other hand, when the local foci were removed without any improvement of the joint affection, the sugar tolerance remained lowered. Dr. Pemberton endeavours to explain the relation of septic foci to the tolerance of the blood to sugar ingestion by assuming that these foci are not necessarily accompanied by a lowered tolerance when they are unproductive of systemic effects. In reality he adduces evidence of the failure of septic foci to produce what is glibly called a "toxæmia." We have pointed out in these columns that when the infecting organism escapes from the focus and invades other tissues, all the usual signs of a septicæmia may be induced. When a few bacteria are implanted in a distant tissue, it is possible for a second local disturbance to occur. But when the focus remains local, the worst that can happen to the body is that the bacteria can die and their proteins or the products of these proteins may be washed out into the circulation and some form of protein intoxication may be produced. That this does not occur in arthritis, at all events in the majority of cases, is proved by Dr. Pemberton's careful investigations.

The study of the clinical signs and of the course of illness was undertaken with the view to ascertain whether any measures could be applied to prevent the onset of the arthritis or to eliminate from the recruits those who were likely to become incapacitated from this cause. A systematic study showed that sufficient bony change to be detected by means of X-rays was usually limited to chronic affections of long standing. It was found that in a number of cases, the arthritis developed as the patient entered upon convalescence from dysentery or influenza. Other infections also appeared to act as determining factors in the causation of the joint affections. The association of exposure to wet and cold with the joint affection could be established in many instances. Few of the patients with chronic joint affections suffered from complications, such as endocarditis. In 14% there was a definite leucocytosis. The effect of various forms of

treatment on the signs and symptoms was studied with care. While septic foci are not likely to have a causal relationship with the arthritis, it is obviously advisable to remove an infected tonsil, to clear up an infection of the accessory sinuses, to deal with carious teeth or gum pockets, or to treat infections of the genito-urinary organs. Rest apparently effects the greatest change in the patients and may be responsible for recovery. Heat, in the form of baking, massage and other local remedies are efficacious in some cases and fail in others. No specific remedies are available, but in the most obstinate cases, especially those with marked disability and deformity of joints, excellent results were obtained by partial starvation. The author warns against the uncritical application of this method of treatment. Great caution should be exercised in the selection of suitable cases for the attempt. The patient must be placed under conditions which admit of continuous observation and first-class nursing. The diet must be prescribed in detail and an accurate record must be kept of the number of calories the patient is receiving. The blood and urine should be watched for signs of acidosis; when this is detected, a more liberal diet must be given. The sugar tolerance can be raised by limiting the amount of protein and carbohydrate and as the sugar tolerance tends to return to normal value, the arthritic changes disappear. These facts provide us with material for further research into the nature of the chronic arthritides.

DETERMINATIONS OF BASAL METABOLISM.

Determinations of the basal metabolic rate are rapidly becoming placed upon a practical basis as a means of diagnosis in clinical medicine, by the method of Benedict, in which a modified and portable apparatus is used for these investigations. It may confidently be stated that tests of the basal metabolism of an organism rest upon an established scientific foundation, since the fundamental facts underlying this procedure have been recognized by physiologists for a considerable period. The general physiological principles involved and the clinical significance of variations in the basal metabolic rate are every day becoming more thoroughly understood. It remains, however, for the clinician to work out the range and value of these estimations and their clinical application in the diagnostics of internal medicine. Although in this country little work in this sphere has been done up to the present time, estimations of the basal metabolism in diseased conditions are nevertheless rapidly becoming a part of the routine diagnostic investigations in institutional work in other parts of the world, especially in the United States of America.

The method is particularly applicable to the investigation of cases exhibiting perversions of function of the thyroid gland. In discussing the clinical application of such investigations, Dr. G. W. McCaskey¹ points out that the question involved is not purely a matter of thyroid function, since the interaction of all the organs of the endocrine system may be in-

¹ *Journal of the American Medical Association*, April 3, 1920.

volved. It is a well-established fact that in cases in which there has been a total extirpation of the thyroid gland, the basal metabolic rate falls on an average 40% below the normal. It has been suggested that, apart from the thyroid hormone, there are other substances, such as amino-acids, proteins, creatin and creatinin, which may play an important rôle in the stimulation and regulation of the basal metabolism. The injection of epinephrine, for instance, has been shown to produce a marked increase in the basal metabolic rate of an animal. It has been maintained that hormones from other endocrine glands may produce effects on metabolism indirectly through the thyroid by neuro-circulatory influences on this gland. The important and recognizable controlling factor in the regulation of basal metabolism is thyrotoxin, which is dependent on the functional activity of the thyroid gland. From the clinical aspect, variations of the basal metabolic rate are taken as an index of thyroid activity. In the absence of more precise knowledge, fluctuations in the metabolic rate, as indirectly determined by the oxygen consumption are to be regarded as the most scientific and practical indication of the activity of the thyroid. From an essentially practical point of view it is held that the routine determination of basal metabolism is of importance in two definite groups of cases: (i.) Cases of definite goitre, in which it is desired to ascertain the degree, if any, of its toxicity. (ii.) A large group of cases, with or without goitre, in which the symptoms resemble either closely or remotely those of thyro-toxicosis. In cases of the first group the degree of thyro-toxicosis may be of great value in enabling the physician to decide upon the nature and extent of the therapeutic measures indicated, whether surgical or medical.

The operative risk of thyroidectomy has been found to be very great indeed when the metabolic rate attains an increase approximating 100%. In such cases non-surgical measures should be employed in an effort to reduce the metabolic rate prior to operation. The success of individual therapeutic measures can be accurately gauged by the determination of the variation in basal metabolism, instead of being estimated with the help of unreliable clinical data, such as the pulse-rate and nervous symptoms.

In the second group fall many doubtful cases exhibiting various symptoms, which may or may not be associated with hyperthyroidism, such as psychoneurotic disturbances, tachycardia or bradycardia, cardiac asthenia, tremor, hyperhidrosis or hypohidrosis, general debility, loss of weight and minor disturbances of the heat regulating mechanism. These symptoms may exist with or without gross or palpable enlargement of the thyroid and may result from nervous and mental stress, malnutrition, gastro-intestinal disturbances, chronic infections, such as tuberculosis and syphilis, and numerous pathological conditions of various organs of the body. The differentiation from thyro-toxicosis can usually be made with a reasonable degree of probability by the general clinical and laboratory methods in every-day employment. The determination of the basal metabolic rate is coming to be regarded as the conclusive evidence for or against the existence of a perversion of thyroid function in such cases. With the advent of portable

apparatus and simplification of technique, the estimation of the basal metabolic rate as a routine clinical procedure promises to throw much fresh light on many hitherto obscure problems in relation to the thyroid gland and its disorders.

The method may be considered to have passed the experimental stage, though further investigation and experience is needed to determine its exact scope and precise limitations, until it becomes established as a routine procedure in diagnosis.

SUN TREATMENT.

The value of direct sunlight in the treatment of certain chronic affections of the skin, indolent ulcers and suppurating wounds has long been recognized. Recently, a new method of utilizing the sun's rays has been introduced, known as the Thézac-Porsmeur method of heliotherapy.

The essential feature of this method is a concentration of the sun's rays, by means of a double convex lens with a diameter of 30.5 cm. and a focal length of 193 cm. The lens is mounted in a canvas cylinder 30.5 cm. in diameter and 91.5 cm. in length; it is placed a few centimetres from the lower end of the cylinder. The adjustment of the lens in relation to the patient is made so that the rays form a circle 8 to 13 cm. in diameter. The degree of activity to which it is desirable to submit the surface treated, can be regulated by bringing the lens nearer to the patient or by removing it further away. In describing a series of cases treated by this method, Dr. R. W. Lovett¹ claims satisfactory results. Suppurating wounds are said to respond to treatment in a characteristic manner. The amount of discharge is immediately increased and later on undergoes diminution. Pale granulations assume a healthier colour and pain and sensitiveness are rapidly diminished. The particular advantages claimed for this method are that it can be delicately regulated and controlled. Moreover, it is applicable when the sun is sufficiently clouded to be useless for general exposure and when carefully used, it is devoid of risk.

THE PREVENTION OF DIPHTHERIA.

The following regulations, issued under the *Health Act, 1919*, of Victoria, have been drawn up by the Commission of Public Health and have received the sanction of His Excellency the Lieutenant-Governor, with the advice of the Executive Council, on June 8, 1920:—

1. These Regulations may be cited as the "Diphtheria Regulations, 1920," and shall come into operation on publication in the *Government Gazette*.
2. All regulations heretofore made relating to matters provided for herein are hereby repealed.
3. In these Regulations, unless inconsistent with the context or subject matter—
 "Authorized" means authorized by a Council.
 "Contact" means, for the purposes of these regulations, any inmate of a house wherein a case of diphtheria has occurred.
 "Council" means Council of a Municipality.
 "Patient" means person suffering or convalescing from diphtheria.
4. On receipt of notification of a case of diphtheria the Council shall forthwith cause the house wherein the patient

¹ *Journal of the American Medical Association*, April 3, 1920.

dwells to be visited by the Medical Officer of Health, or by an authorized person, and such Officer of Health or authorized person shall—

- (a) Ascertain whether the patient is effectually isolated.
- (b) Give the occupier such instructions as will enable him to prevent the conveyance of the disease from patient to others.
- (c) Take swabs, when necessary, from every contact, and send same to a competent bacteriologist for examination.
- (d) Make such inquiries and obtain such particulars as are necessary to enable the source of infection to be traced.

5. Every Council shall cause every patient and every carrier to be effectually isolated, and detained in isolation, and every Council is hereby authorized to use such guards and force as are necessary for these purposes, and no such patient or carrier shall be released from detention until swabs, taken at an interval of not less than 48 hours, are declared negative by a competent bacteriologist.

6. In the case of any carrier still remaining positive after the expiration of one month after isolation, the Medical Officer of Health may release such carrier, subject to such carrier undertaking to faithfully carry out his instructions: provided that if such a carrier fails or neglects to carry out such instructions the Medical Officer of Health shall take such action as is necessary to again isolate such carrier.

7. The Council shall cause all contacts under school age, and all those attending school, to be isolated until the Medical Officer of Health is satisfied that they are not a danger to the public health; all other contacts shall be kept under surveillance by the Medical Officer of Health for such period of time as he considers necessary.

8. The occupier of any house wherein a case of diphtheria occurs, and in which any child attending school resides, shall, on becoming aware of the existence of such case, forthwith inform the head teacher, or person in charge of the school, whereat the said child attends, of the occurrence of such case.

9. Every Council shall in respect of every case of diphtheria reported to the Council ascertain whether any inmate of the house wherein the case occurs, attends any school, and, if so, the Council shall inform the head teacher, or person in charge of such school, of the occurrence of such case.

10. The head teacher, or person in charge of every school, on learning that any scholar is absent owing to being infected with diphtheria, or to the existence of diphtheria at the house whereat such scholar resides, shall forthwith inform the Council of the district wherein the pupil resides of the circumstances.

11. Where a case of diphtheria occurs at any dairy or place where milk is kept for sale, the Medical Officer of Health shall, by order, in writing, prohibit the sale of milk for such time as he considers necessary to safeguard the public health.

12. Every dairyman or seller of milk on whose premises a case of diphtheria occurs shall—

- (a) Immediately discontinue the sale of milk until authorized by the Medical Officer of Health to resume;
- (b) Forthwith inform the Council of the occurrence of such case; and
- (c) Condemned by the Medical Officer of Health, or any authorized person, give names and addresses of customers supplied, and also particulars as to sources of supply.

13. Where any Council has reasonable grounds for believing that milk, produced in another municipal district, is a factor in spreading infection, such Council shall inform the Council of the district wherein such milk is produced of the circumstances, and such latter Council shall forthwith cause inquiries to be made, and take such action as is necessary to safeguard the public health.

14. No patient nor any carrier shall enter or remain in any public place, or any public conveyance, or handle food intended for consumption by others.

15. The Council shall cause every house where a case of diphtheria has occurred to be disinfected, in whole or in part, when and as the Medical Officer of Health directs.

16. Every Council, on the recommendation of the Medical

Officer of Health, shall supply, free of charge, antitoxic serum in every necessitous case.

17. Every carrier and every contact shall submit to and carry out such instructions as the Medical Officer of Health specifies, and for such period of time as he directs.

18. Every person shall truly answer any question asked by the Medical Officer of Health, or authorized person, in respect of any matter relating to any of the provisions of these regulations.

19. Every Council and its officers are hereby authorized and required to superintend and see to the execution of these regulations, and at its own cost to do and provide all such acts, matters and things as are necessary for such purposes.

20. Any Council or person who fails to comply with any of the provisions of these regulations, or is guilty of any neglect or disobedience thereof, is liable to a penalty of not more than £20, and in the case of a continuing offence to a further daily penalty of not more than £5.

Congress Notes.

The date of the Australasian Medical Congress is August 23-28, 1920.

The official address of the Congress is: The Honorary Secretary, 11th Session, Australasian Medical Congress, B.M.A. Building, Adelaide Street, Brisbane.

The following are the Local Secretaries in the several States:—

New South Wales: Dr. F. Brown Craig, Macquarie Street, Sydney.

Victoria: Dr. A. Leo Kenny, Collins Street, Melbourne.

South Australia: Dr. F. S. Hone, North Terrace, Adelaide.

Western Australia: Dr. W. Trethowan, 267 St. George's Terrace, Perth.

Tasmania: Dr. E. Brettingham Moore, Macquarie Street, Hobart.

New Zealand: Dr. C. E. A. Coldicutt, 82 Simonds Street, Auckland.

Queensland: The Honorary General Secretary and the Coadjutor Secretary, c/o. Queensland Branch, British Medical Association, Adelaide Street, Brisbane.

The following is a list of the Honorary Secretaries of the Sessions:—

(i.) *Medicine:* Dr. Andrew Stewart, Wickham Terrace, Brisbane.

(ii.) *Surgery:* Dr. Donald A. Cameron, Wickham Terrace, Brisbane.

(iii.) *Obstetrics and Gynaecology:* Dr. Lillian V. Cooper, George Street, Brisbane.

(iv.) *Pathology and Bacteriology:* (In place of Dr. A. W. Dean) Dr. J. V. Duhig, Wickham Terrace, Brisbane, and Dr. A. Breinl, Institute of Tropical Medicine, Townsville.

(v.) *Public Health:* Dr. J. S. C. Elkington, Federal Quarantine Department, Brisbane.

(vi.) *Ophthalmology:* Dr. J. Lockhart Gibson, Wickham Terrace, Brisbane.

(vii.) *Otology, Rhinology and Laryngology:* Dr. W. N. Robertson, Wickham Terrace, Brisbane.

(viii.) *Diseases of Children:* Dr. A. Jefferis Turner, Wickham Terrace, Brisbane.

(ix.) *Naval and Military Medicine and Surgery:* Dr. G. P. Dixon, C.B.E., Wickham Terrace, Brisbane.

(x.) *Neurology and Psychological Medicine:* Dr. T. H. R. Mathewson, Brunswick Street, New Farm, Brisbane, and Dr. J. R. Nicoll, Hospital for Insane, Toowoomba.

(xi.) *Dermatology and Radiology:* Dr. V. McDowall, Preston House, Queen Street, Brisbane.

Members are particularly requested to announce their intention to read papers to the Sectional Secretaries concerned and not to the State Secretaries. The papers should be in the hands of the Sectional Secretaries at least one month before the beginning of the Congress.

Section of Public Health.

In our issue of June 12, 1920, page 567, a paragraph was

printed under the heading, "Section of Surgery," requesting members to return their replies to the collective investigation circular. The collective investigation circular referred to was issued by the Section of Public Health.

Section of Diseases of Children.

The Secretary of the Section of Diseases of Children informs us that the following programme has been prepared:

Tuesday, August 24, 1920.—President's address; several papers.

Wednesday, August 25, 1920.—Discussion on the surgical treatment of infantile paralysis. Openers: Dr. G. Bruton Sweet, of Auckland, Dr. H. Douglas Stephens, of Melbourne. Papers on surgical subjects.

Thursday, August 26, 1920.—At the Hospital for Sick Children: (a) demonstration of tropical diseases; (b) demonstration of other cases of interest. Discussion on white children in the tropics.

Friday, August 27, 1920.—Discussion on gastro-intestinal troubles of infancy. Openers: The President (Dr. W. F. Litchfield), Dr. Jeffreys Wood, of Melbourne. Papers on medical subjects.

Corrigenda.

Through a typographical error in the copy of the Second Circular sent to this journal, the Sections of Otolaryngology and of Ophthalmology were joined together as Section VI. We are informed that these two sections will be kept distinct from one another and that the numbering introduced in the First Circular will be retained.

We regret that the rank held in the Order of the British Empire by Lieutenant-Colonel H. S. Newland, President of the Section of Surgery, and by Colonel G. P. Dixon, Honorary Secretary of the Section of Naval and Military Medicine and Surgery, has been incorrectly given in the circular. In both cases it should be Commander of the Order of the British Empire.

THE OSLER MEMORIAL FUND.

We beg to acknowledge the receipt of the following contribution to the Osler Memorial Fund:—

Dr. Howard Bullock (Sydney) £10 10 0

Hospitals.

THE ADELAIDE HOSPITAL.

The annual report of the Board of Management of the Adelaide Hospital for the year 1919 is the fiftieth annual report of that institution. In addition to the statistical records, there are numerous illustrations of the hospital buildings and grounds. A report of the South Australian Government laboratory of bacteriology and pathology is included.

Statistical.

The Adelaide Hospital is a governmental institution, which derives its revenue largely from consolidated funds, to some extent from fees paid by patients within the hospital and for work done in the bacteriological department and to a smaller extent from public contributions. The sum of £2,021 7s. 8d. was received during the year as fees from patients and subscribers' contributions amounted to £930 14s. 11d.. The Government provided £41,068 2s. 3d. out of a total of £45,255 7s.. Of this sum £17,511 6s. 9d. was disbursed as salaries, £14,109 4s. 1d. for provisions. The annual cost of each bed occupied is stated to have been £142 14s. 11d., which is an increase of £22 17s. 11d. on the annual cost for the preceding year and is more than three times the cost per bed in the year 1870.

The total number of patients admitted during the year was 4,765; the average daily number of patients in hospital 299. There were 4,760 patients discharged during the year, of whom 540 were unrelieved and 405 died. The attendances of out-patients during the year were 16,370. The number of patients suffering from enteric fever treated during the year was 14. This constitutes a record, being the smallest number of patients treated for this disease in any year since 1887. Three of these cases terminated fatally, the death-rate being therefore unusually high—21.4%. A table is provided to

show the localities from whence cases of enteric fever have been received during the last eleven years. There were 52 patients suffering from influenza, 95 from pulmonary tuberculosis, 81 from acute articular rheumatism, 95 from organic disease of the heart, 206 from malignant disease, 195 from alcoholism, 53 from pneumonia, 271 from appendicitis and typhilitis, 197 from accidents of pregnancy, 27 from accidents of labour, 32 from puerperal septicemia and 70 from Bright's disease.

A list of the operations performed constitutes an appendix.

Hospital Accommodation.

On account of the urgent need which exists for better accommodation of patients a deputation waited upon the Honourable the Chief Secretary. A request was made that the funds of the Martin bequest should be made available for this purpose. The chairman pointed out that the site of the present hospital was built upon in 1857 and that, though the hospital buildings had been added to on several occasions since that date, an urgent need existed for additional accommodation to prevent overcrowding of patients and to allow the work of the medical staff to be carried on under more favourable conditions.

It was respectfully requested that consideration be given to the possibility of making available the interest upon the value of the property bequeathed to the hospital by the late Mr. Martin, since in the history of the hospital the need for money was never more urgent than at the present time. The deputation received a sympathetic hearing, with the promise that the matter would be brought before the cabinet.

Medical Staff.

Several members of the honorary medical staff have been reappointed for a further term of three years. During the year Dr. J. A. G. Hamilton, Honorary Gynaecologist, and Dr. E. Poulton, Honorary Surgeon, were appointed to the honorary consulting staff, these gentlemen having resigned from the active staff after years of valuable service. The vacancies occurring on the surgical staff were filled by the appointment of Dr. Cavanagh Mainwaring and Dr. Simpson Newland, C.B.E., D.S.O.

Pre-Maternity Clinic.

A pre-maternity clinic and extern department have been inaugurated in connexion with the hospital, under the charge of Dr. T. G. Wilson. The clinic has for its object the supervision of gravid women during their term, the conduct of labour and the puerperium and, in addition, the teaching of students in obstetrics.

Veneral Diseases Clinic.

The night clinic under the direction of Dr. H. Rischbieth has completed the third year of its activity in the treatment of venereal disease. The total number of patients under treatment during the year was 587, including 213 cases of syphilis and 392 cases of gonorrhoea. Owing to the epidemic of influenza, the clinic was closed for several weeks during the earlier part of the year. The total attendances for the year numbered 5,036. The results of treatment of syphilis in this department are stated to have been satisfactory. The importance of testing the blood by the Wassermann method at intervals for a consideration period after the conclusion of treatment is emphasized.

The treatment of gonorrhoea is stated to have been satisfactory, provided that patients sought treatment early and attended regularly. It is pointed out that, in order to employ the most modern methods in dealing with this disease, facilities for endoscopy and other forms of special treatment are necessary, together with a larger staff of trained assistants.

Influenza Hospital.

From June 6 to December 2, 1919, the Exhibition Hospital for influenza was under the control of the Board of Management. The patients treated in this hospital numbered 588, of whom 520 were discharged cured; the remaining 68 succumbed to the disease.

The Consumptives' Home.

The Consumptives' Home, which is regarded as an annex to the hospital, is provided for the treatment of patients suffering from pulmonary tuberculosis. Patients suffering from cancer are also provided for in fourteen single bedrooms. The total number of patients suffering from tuber-

culosis treated during the year was 126, of whom 65 died. There were admitted 47 patients suffering from cancer during the same period. The daily average number of patients in the home was 43.

Infectious Diseases Block.

A record number of patients were treated in this department during the year; the total admissions were 708. There was a marked increase in the number of cases of scarlet fever, measles and influenza, as compared with the previous year, and a smaller number of cases of diphtheria and erysipelas.

During the year 340 patients were admitted with diphtheria, in 262 of which the diagnosis was confirmed by bacteriological examination. The mortality was 5.7%. There were 218 patients with scarlet fever, of whom two died—a case mortality of 0.9%. Patients suffering from measles numbered 97, of whom one died.

An unusually large number of children were admitted, many from other institutions, who had on admission both diphtheria and scarlet fever or diphtheria and measles.

Accommodation for twenty or more patients with influenza has lately been provided in the infectious diseases block.

More accommodation is required, especially for the many convalescent children, who must be detained in hospital during the necessary period of isolation.

Laboratory of Bacteriology and Pathology.

The laboratory of bacteriology and pathology is provided in order to carry out the bacteriological and pathological work of the hospital. Private work is also carried out at the laboratory. Bacteriological and other examinations are performed for various public health bodies, such as the examination of drinking water and foodstuffs. During the influenza epidemic many examinations of throat swabbings and sputum were made.

Examinations were also carried out for the Stock Department, including the bacteriological examination of milk and histopathological examinations of diseased animal tissues. The work of the department of bacteriology and pathology has continued to prove of great utility, not only to the hospital, but also to the outside public, as previously detailed. The total number of pathological examinations for the year was 9,239, including the preparation of 192 vaccines.

BRISBANE GENERAL HOSPITAL.

The following additional appointments have been made to the honorary staff of the Brisbane General Hospital:—

Honorary Assistant Surgeon: Dr. E. S. Meyers (B.M.A.).

Honorary Assistant Gynecologist: Dr. R. Marshall Allan (B.M.A.).

Honorary Assistant Ophthalmologist: Dr. George Thomson.

These three gentlemen are returned medical officers.

A CLINIC FOR VENEREAL DISEASES AT THE MELBOURNE HOSPITAL.

At a meeting of the Committee of the Melbourne Hospital, held on June 15, 1920, a letter was received from Professor Sir Harry Allen, enclosing a cheque for £10,000 from His Excellency the Governor-General from the funds of the British Red Cross Society, to be used for the establishment of a clinic for the treatment of venereal diseases. At the same meeting it was announced that the sum of £5,000 had been forwarded by the trustees of the estate of the late P. Brennan, of Gippsland, to be used for the same purpose. The President of the Committee, in moving that the thanks of the Committee be sent to the donors, stated that the establishment of a clinic for venereal diseases had been under consideration for some time. It was estimated that the clinic would cost £10,000 to erect and that the sum of £10,000 a year would be required for maintenance. Although it was pointed out that the New South Wales Government had provided £28,000 for the building of the clinic at the Royal Prince Alfred Hospital, the Government of Victoria had found itself unable to do anything.

It was resolved that a Committee consisting of members of the honorary medical staff and of the members of the Buildings Committee consider the question of the establishment of a clinic.

It is announced in the *South Australian Government Gazette* of June 10, 1920, that the following have been appointed members of the Medical Board of South Australia: Dr. A. A. Lendon, Dr. Bedlington H. Morris, Dr. R. S. Rogers, Dr. W. A. Verco and Dr. W. T. Hayward, C.M.G..

The undermentioned have been elected members of the New South Wales Branch of the British Medical Association:—

R. M. Alcorn, Esq., Lic., Lic. Mid., 1914, R. Coll. Phys., Irel., Lic., Lic. Mid., 1914, R. Coll. Surg., Irel., c/o Dr. R. G. Alcorn, West Maitland.

L. D. Mercer, Esq., M.B., Ch.M., 1918 (Univ. Sydney). "Wendouree," Derby Street, Epping.

J. W. Tarleton, Esq., M.B., 1902 (Univ. Sydney), South Woodburn, Richmond River.

D. S. Prentice, Esq., M.B., B.Ch., B.A.O., 1918 (Dub. Univ.), H.M.A.S. *Tingira*, Rose Bay.

The undermentioned has been nominated for election as a member of the New South Wales Branch:—

Keith Roswald McGregor, Esq., M.B., 1919 (Univ. Sydney), Delegate, New South Wales.

PUBLIC HEALTH OF NEW SOUTH WALES.

(Continued from Page 569.)

Hospital Admission Depôt.

Dr. Arthur Palmer, the First Government Medical Officer, deals in a special report with the work of the Hospital Admission Depôt. This report, as usual, is included as an appendix. During the year 9,885 indigent persons applied for admission to an institution on account of illness. They were sent to the State hospitals, the State asylums or the metropolitan hospitals or convalescent homes. Each person applying was examined at the Depôt or at their homes. In addition to this work, the Government Medical Officers are required to examine all persons applying for admission to the public services. During the year there were 396 applications. Public servants seeking to retire before the age of sixty years, on account of ill-health, and those desirous of continuing to fill their positions after they had attained the age of sixty, were also examined. The number of police officers examined was 252. In addition, members of the force were attended during illness at the Medical Officer's rooms in the Police Department. The Medical Officers also examined 2,690 persons under the provisions of the *Factories Act*. The number of vaccinations performed was 112.

Dr. Palmer complains that the amount of work necessitated by the *Workmen's Compensation Act, 1913*, has increased so considerably that he has had difficulty in carrying out his work in connexion with the Treasury Insurance Board, the Crown Law Office and the Legal Aid Office. He had to make *post mortem* examinations in 132 instances and to undertake an immense amount of other medico-legal work. Closely connected with these duties is the regular visitation of the prisoners at the Long Bay Penitentiary, for the purpose of certifying lunatics and for other reasons. Lastly, there was accomplished a large amount of work at the Reception House at Darlinghurst. We have called attention in the past to the unjustifiably large amount of work, involving a very extensive knowledge of many branches of medical science by two medical officers. If the work were divided among twice as many officers, each of them would be kept busy. During the course of the year Dr. A. T. Chapple resigned the position of Second Government Medical Officer and Dr. A. E. Gibbs was appointed in his stead.

The Coast Hospital.

In the absence of the Medical Superintendent, Dr. R. J. Millard, C.M.G., C.B.E., Dr. Donald Wallace carried out his duties. The staff consists of one medical superintendent, six

assistant medical officers, a matron and 194 members of the nursing staff, in addition to the administrative officers and the domestic staff. One of the senior medical officers and three of the assistant medical officers were absent on military service during the year 1918.

On the first day of the year there were 412 patients in the hospital. During the twelve months 4,550 patients were admitted. There were still 333 under treatment on the last day of the year. The number of patients discharged was 4,385 and of those who died 194. The death-rate was therefore 4.25%. The average number of beds occupied was 513.41 and the average length of stay in the hospital was 39.6 days.

Of the total number of persons treated in the institution, 2,123, or 46.5%, were admitted for the following infective processes: diphtheria, scarlet fever, morbilli, parotitis, erysipelas, pertussis, enteric fever and variola. If venereal diseases, tuberculosis, malaria, influenza, diarrhoea and enteritis, acute rheumatism, pneumonia, pleurisy, acute endocarditis, cerebro-spinal meningitis, puerperal septicæmia, tetanus, beri-beri and infective conditions of the skin be added, the proportion is found to be 63.4%. There were 1,241 cases of diphtheria, with 13 deaths, which is equivalent to a case mortality of 1.05%. The total number of cases notified within the metropolitan district was 2,399, so that 51.7% of these cases were dealt with in the Coast Hospital. Of the 1,241 patients, 478 were under five years of age and 18 were under one year. The majority of the patients received between 4,000 and 12,000 units of antitoxin. The smallest amount given was 2,000 and the largest 120,000 units. Antitoxin was given to 701 patients.

The number of patients treated for scarlet fever was 333. Of them nine died, yielding a case mortality of 2.7%. The number of cases notified in the metropolitan district was 765. It thus appears that 43.6% of the patients were sent to the Coast Hospital. There were 314 cases of morbilli, with 13 deaths, or a case mortality of 4.1%, 92 cases of erysipelas, with ten deaths, or a case mortality of 10.8%, 63 of pertussis, with eight deaths, or a case mortality of 12.7% and one case of variola. The number of cases of enteric fever was 41. There were six deaths, or a case mortality of 14.66%. The ages of the patients who died, varied between under five years and over forty. From the table of diseases information concerning the case mortality can be gleaned. In the majority of instances, this information is of small significance without further details. The fact that of 22 patients admitted for the treatment of pulmonary tuberculosis seven died, does not justify the conclusion that this represents the frequency of a fatal termination in this disease.

The work undertaken in the hospital laboratory appears to have increased very considerably. We note that some of the work is carried out at the Micro-biological Laboratory, such as the Wassermann tests and the Widal tests, while the simpler examinations were conducted in the hospital laboratory. Modern practice demonstrates that it is advisable for all laboratory investigations in connexion with cases of illness to be conducted within the institution. The appointment of a skilled pathologist and bacteriologist would be a great advantage to this institution.

Instruction is given to pupil nurses and probationers by the Matron and her staff and by the Medical Officers. Examinations were held for nurses after one, two, three and four years' training.

Waterfall State Sanatorium.

The Waterfall State Sanatorium contains thirteen wards, each accommodating from 18 to 28 patients, and two single-bed chalets. The total number of beds is 334. These patients are under the care of a medical superintendent and an assistant medical officer, while the staff is supplemented by an honorary consulting physician and an honorary physician. On January 1, 1918, there were 308 patients in the Sanatorium. During the year 493 patients were admitted, while on the last day of the year there were 349 patients still under treatment. The total number of patients discharged was 279 and the average length of treatment of these patients was 212 days. Of the 279 patients, 57 left the Sanatorium with the disease arrested. In 67 the condition was much improved, in 129 it was improved and in 26 it was unimproved. The patients in whom arrest of disease occurred, were kept for a longer time under treat-

ment (on an average 322 days) than the rest. Dr. H. W. Palmer records that they left the Sanatorium without any signs of active disease and were capable of returning to suitable employment. The 48 males and 19 females whose condition was much improved, were able to return to ordinary life with light work. He is satisfied with the results obtained, in view of the hopeless condition of the majority of the patients at the time of admission. He calls attention to the grave disadvantage of admitting persons to a sanatorium who are suffering from pulmonary tuberculosis in a chronic stage or in an acute form. The sanatorium has nothing to offer these patients. On the other hand, patients in the early stage of the disease can be benefited very considerably and, under favourable conditions, the disease may be arrested. It will be noted that arrest was obtained in approximately 12% of the patients under treatment. Dr. Palmer also considers that the present time is opportune for the erection of three classes of institutions in which tubercular patients could receive proper attention. The frequency of tuberculosis among returned soldiers necessitates the expenditure of a large sum of money and he is of opinion that if this money were spent on the erection of proper institutions, the returned men would benefit very considerably. There should be the sanatorium for persons with curable tuberculosis, an institution for persons with chronic disease tending to run a slow course and an institution for persons with advanced disease who are expected to die within a short time. The number of deaths which occurred during the year was 173. This fact is extremely significant. We have frequently called attention to the experience of those in charge of sanatoria for tuberculous patients that the occurrence of a death produces a very detrimental effect on the other inmates. It is a mistaken policy to admit a patient to a sanatorium who is likely to die.

During the course of the year an open-air ward, two staff cottages and nine open-air chalets were completed. Dr. Palmer reports that much illness occurred among the nurses, rendering the work of looking after the patients very difficult.

Lepor Lazaret.

During the course of the year only one patient was certified as suffering from leprosy and was admitted to the Lazaret. The total number of inmates on the first day of the year was 24. One patient was discharged, so that the increase to 25 was only temporary. The total number of lepers who have been admitted since the opening of the Lazaret in 1883, was 146, of whom 79 were coloured people and 67 were of European descent. The total number of deaths was 66, while 16 patients were discharged, 39 were repatriated and one absconded. A full account is published of the patient admitted in February and short progress reports are given of the other 23 patients. The person discharged was a native of Fiji, of European descent, 32 years of age. At the time of discharge his health was good and an old-standing ulcer of the left foot had finally healed. No macules or other traces of the disease were present on the face or on the trunk, while the only effects of the disease remaining were the loss of sensation in an area comprising the whole of the dorsal surface of the hands, half the ring fingers and both sides of the little fingers. The thenar and hypo-thenar muscles were wasted. There was a small, semi-circular papule on the outer side of the right ankle. The sensation was dulled in both feet. No Hansen's bacilli were discovered in any situation, in spite of careful search. The man had been in the Lazaret for 15 years.

Lady Edeline Hospital for Babies.

During the course of the year 209 little patients were admitted to the Lady Edeline Hospital for Babies. Of these, 34 were under three months, 51 were between three and six months, 119 were between six months and two years and five were over two years of age. The total number of deaths was 52. There were 142 infants discharged during the year, so that the total mortality represents 28.8%. The mortality of the infants under six months of age was above 30%, while that of infants over six months was slightly higher than 20%. Of the 209 patients, 108 were admitted for gastro-enteritis and 54 for enteritis. Fifteen of the children were still under treatment at the end of the year. Of the former, 27 died and of the latter nine died. Calculated on the basis of 147 patients, the mortality from these gastro-enteric infections was approximately 24.5%.

Very few instances of other diseases were met with, marasmus being the next most common, with seven cases and three deaths, and broncho-pneumonia, with seven cases and three deaths. It is difficult to understand what is meant by the entry of one case of mental deficiency "relieved." Mental deficiency is not often diagnosed in infancy and we are unaware of any measures that could lead to its "relief." We note also that one of the children suffered and died from "antlactasia." This word is probably meant for atelectasis.

Denistone House Convalescent Hospital for Men.

The pendant to the Convalescent Home for Women is Denistone House Convalescent Hospital for Men at Eastwood. The majority of the patients in this institution are admitted after discharge from the metropolitan hospital. The patients are kept on an average for four weeks, but in some cases an extension of time is granted. On the first day of the year there were 15 patients in the institution. During the course of the year 264 were admitted. One death occurred. At both convalescent homes milk, vegetables, eggs, etc., are produced.

(To be Continued.)

Correspondence.

PAYING HOSPITALS.

Sir: May I suggest that the time is ripe for a change in the relations of the medical profession to our public hospitals, more especially those for the treatment of special conditions. I am aware that I am on delicate ground, and that successive Council meetings of the British Medical Association have reaffirmed the resolution of Federal Congress that: "Public hospital shall be solely for the benefit of necessitous poor," to the exclusion of those who are able and willing to pay according to their means for treatment required. Nevertheless, I hold, with a considerable number of my colleagues, that, as conditions are at present, the hospitals of which we have had experience are not reserved for the absolutely destitute, but are used by many who, being unable to pay specialists' usual fees, apply to the hospital in the first instance, or bring a letter from their family doctor, after having paid him what they can afford in fees. This class of patient is growing rapidly and their donations are a help to the hospital finances. But what of the medical staff? Traditionally their services have been purely honorary in the interests of the suffering poor, but where payment for their services, wholly or in part, is made or is possible, the position is quite different and to say that such an institution exists for the benefit of suffering poor is akin to humbug.

It must be admitted that a large section of the community is unable to pay usual medical and hospital fees and I would suggest, in the absence of intermediate hospitals, that such patients be admitted to the public institutions as paying patients, the surgeon receiving payment for services after deducting maintenance costs. True, we would cease to be called honorary medical officers, but I cannot see that that would signify anything. If one felt that he would prefer his services to be purely honorary, there need be no obligation on his part to accept payment. The military hospitals were staffed by medical officers, who willingly gave of their best for a mere pittance, as I heard one express it; but I have never known any of them to be backward in collecting his money at the pay office. In fact, some have admitted openly that they preferred military to civil hospitals for this reason. I am certain, sir, that I am not alone in holding these views, and would like to know the feelings of the profession generally on the subject.

Yours, etc.,

"MEDICAL STAFF."

Melbourne, June 14, 1920.

PAROXYSMAL TACHYCARDIA AND PULMONARY OEDEMA.

Sir: Having read in a few recent issues of the *Journal*, reports of cases of pulmonary oedema, I thought a few notes on the following case might be of interest.

I was called out at 1 a.m. to see M.R., unmarried lady, of 27. I found her sitting up in bed in a state of orthopnoea and coughing up large quantities of a pale, straw-coloured fluid. During inspiration a decided moist crackling sound could be heard some feet away from the patient. On examination I found that the apex beat of the heart was just outside the nipple line and there was one finger's breadth right cardiac dullness. The pulse-rate was tremendous—about 250 per minute was the nearest I could get to it. The heart sounds were very forcible, the first sound especially having a very "slapping" quality. As the condition had commenced suddenly, I looked on the case as one of paroxysmal tachycardia, though I had not heard of cases progressing to the extent of producing oedema of the lungs. On auscultation of the lungs, showers of crepitations could be heard in practically all areas.

I gave the patient a hypodermic of the usual morphia, strychnia and atropine and, believing that the right heart was not standing the strain too well, I proceeded to venesection. However, the blood did not flow very freely and as there was no cyanosis, I did not continue after withdrawing about five ounces.¹ The patient was somewhat relieved by this time and could gasp out a few words between breaths. I learned that she had had several previous, though not so bad, attacks and had never been relieved until she had vomited. I injected apomorphine, which produced vomiting in ten minutes, but I could not satisfy myself that the patient was really improved by the proceeding. Gradually, however, the breathing improved until finally she went to sleep in an almost sitting position. The coughing had also subsided, but the pulse was still over the 200.

I saw her some eight hours later. She was still breathless and had moist sounds in the chest and occasionally coughed up some frothy sputum. The pulse was 108, with a thrill over the mitral area and a marked pre-systolic murmur. I found that there was a history of chorea as a child. I put the patient on full doses of digitalis every four hours. Two days later the pulse was 72 and the patient was much improved. The breathlessness had gone and an occasional crepitation was all that could be heard in the chest. I reduced the dose of digitalis and the patient made an uneventful recovery.

I have hurried over the latter part of the story, because the points I would like to be satisfied on are these. Is a case like this to be regarded as paroxysmal tachycardia superimposed on a mitral stenosis? There was certainly no "flop" of the heart which then recommenced beating with normal rate. If there had been no mitral stenosis, is it likely that the case would have pulmonary oedema?

Yours, etc.,

K. A. STEPHENSON.

Clunes, Victoria,
June 14, 1920.

THE RATTEN INQUIRY.

It has been announced in the public press that a difficulty has arisen in connexion with the investigation into the validity of the diploma of Victor Richard Ratten. It will be remembered that the Medical Council of Tasmania, after due inquiry, arrived at the conclusion that a *prima facie* case had been made out in accordance with the provisions of the *Medical Act, 1919*. The Council is compelled, under these circumstances, to submit the case to the Supreme Court. It is stated that the Council has no power to expend money in the prosecution of a further inquiry and, indeed, has no money, even if it had this power. Further, it is stated that objection has been raised to the proposal that the Government should provide funds to enable the Medical Council to proceed with the investigation, unless the Government is at the same time prepared to provide Victor Richard Ratten with funds to enable him to conduct his defence. We may point out that the Government has deliberately passed an Act of Parliament for the purpose of protecting this individual. This Act of Parliament prescribes certain duties for the Medical Council of Tasmania. If the Government, having determined the procedure in these cases, does not make further provision to enable the Council to

¹ 4.e., 0.14 litre.

carry out its obligations, the public will be forced to the conclusion that the Premier is afraid that his protégé is unable to face the inquiry. While the medical profession is receiving treatment of this kind at the hands of the Government of Tasmania, we would urge members to consider twice before settling in the island State.

Proceedings of the Australian Medical Boards.

QUEENSLAND.

The undermentioned have been registered, under the provisions of *The Medical Act of 1867*, as duly qualified medical practitioners:—

Henry Dolman, M.B., Ch.M., Univ. Syd., 1916, Beenleigh.
Eric Melkie, M.B., Ch.M., Univ. Syd., 1918, Ingham.
George Middleton, M.B., Univ. Syd., 1919, Wynnum.
Rowland Jordan Gore Armstrong Pittar, M.B., Univ. Syd., 1919, Atherton.
William Bede O'Connor, M.B., Ch.M., Univ. Syd., 1920, Brisbane.
Victor Roy Wilson, M.B., Univ. Syd., 1920, Burketown.
The following additional registration has been made:—
Robert Marshall Allan, F.R.C.S., Edin., 1920, Brisbane.

Medical Appointments.

For a period of three months, on probation, Dr. W. A. Harrison has been appointed Health Officer in the Department of Public Health of Queensland.

The appointment is announced of Dr. Annie S. Robertson as Medical Officer to the Public Service Board of New South Wales, for six months on probation.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxv.

Victorian Eye and Ear Hospital: Honorary Aural Surgeon.
Hospital for Sick Children, Brisbane, Honorary Assistant Surgeon to Ear, Nose and Throat Department.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Friendly Society Lodges (other than the Grand United Order of Oddfellows and the Melbourne Tramways Mutual Benefit Society), Institutes, Medical Dispensaries and other Contract Practice. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Cloncurry Hospital. Stannary Hills Hospital.

Branch.	APPOINTMENTS.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW SOUTH WALES. (Hon. Sec., 36-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Balmmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phoenix Mutual Provident Society.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

June 30.—Vic. Branch, B.M.A., Council.
July 2.—Q. Branch, B.M.A.
July 6.—N.S.W. Branch, B.M.A., Council (Quarterly).
July 7.—Vic. Branch, B.M.A.
July 8.—Q. Branch, B.M.A., Council.
July 9.—N.S.W. Branch, Clinical.
July 9.—S. Aust. Branch, B.M.A., Council.
July 13.—N.S.W. Branch, B.M.A., Ethics Committee.
July 13.—Tas. Branch, B.M.A.
July 15.—Vic. Branch, B.M.A., Council.
July 16.—Eastern Suburbs Med. Assoc. (N.S.W.).
July 17.—Northern Suburbs Med. Assoc. (N.S.W.).
July 20.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
July 21.—W. Aust. Branch, B.M.A.
July 22.—Q. Branch, B.M.A., Council.
July 27.—N.S.W. Branch, B.M.A., Medical Politics Committee; Organization and Science Committee.
July 28.—Vic. Branch, B.M.A., Council.

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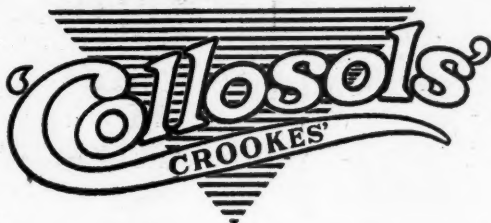
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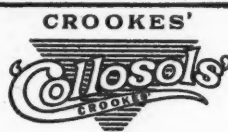
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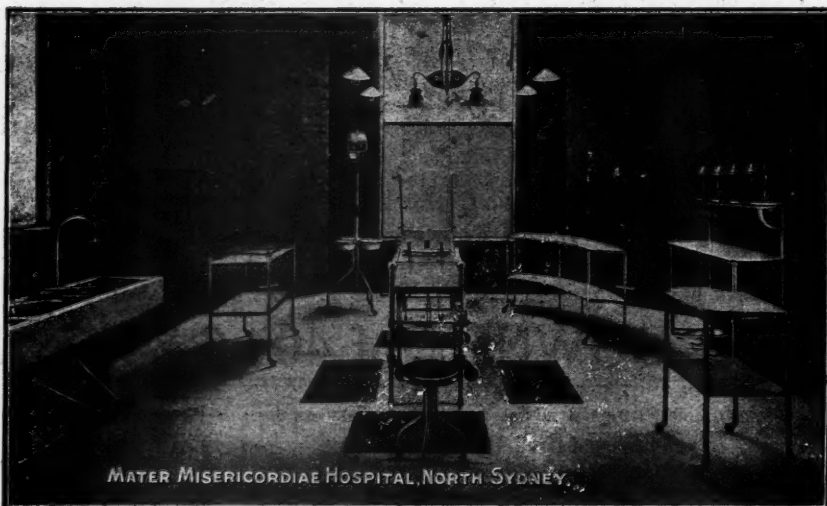
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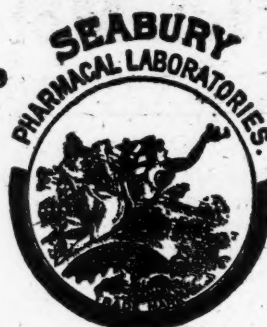
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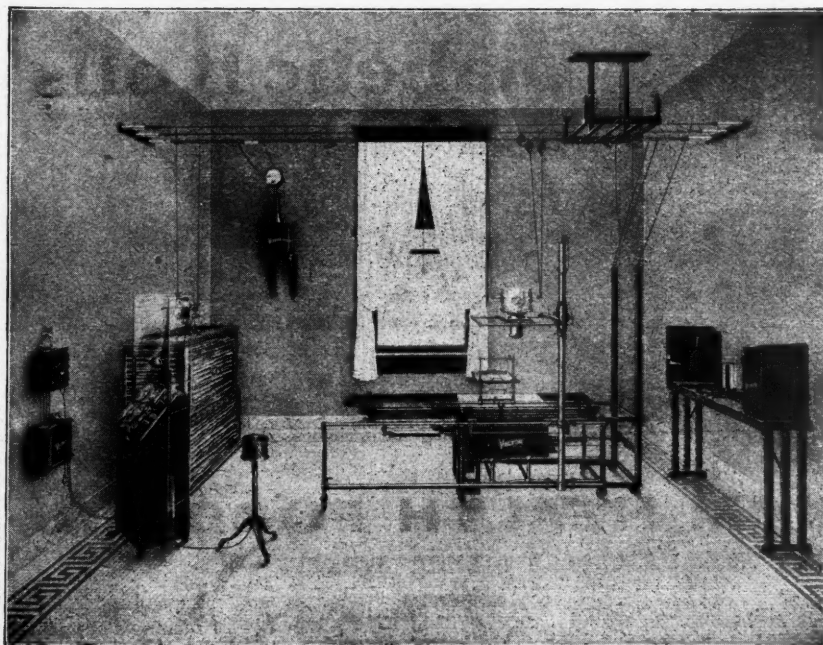
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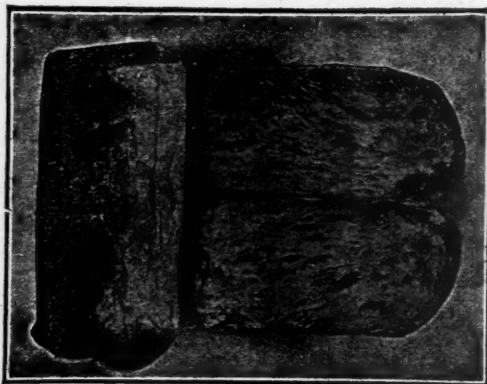
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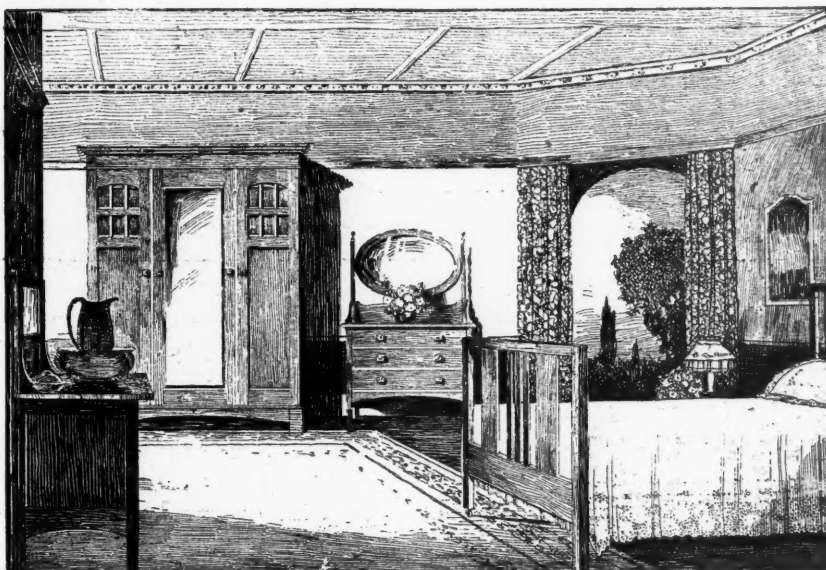
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